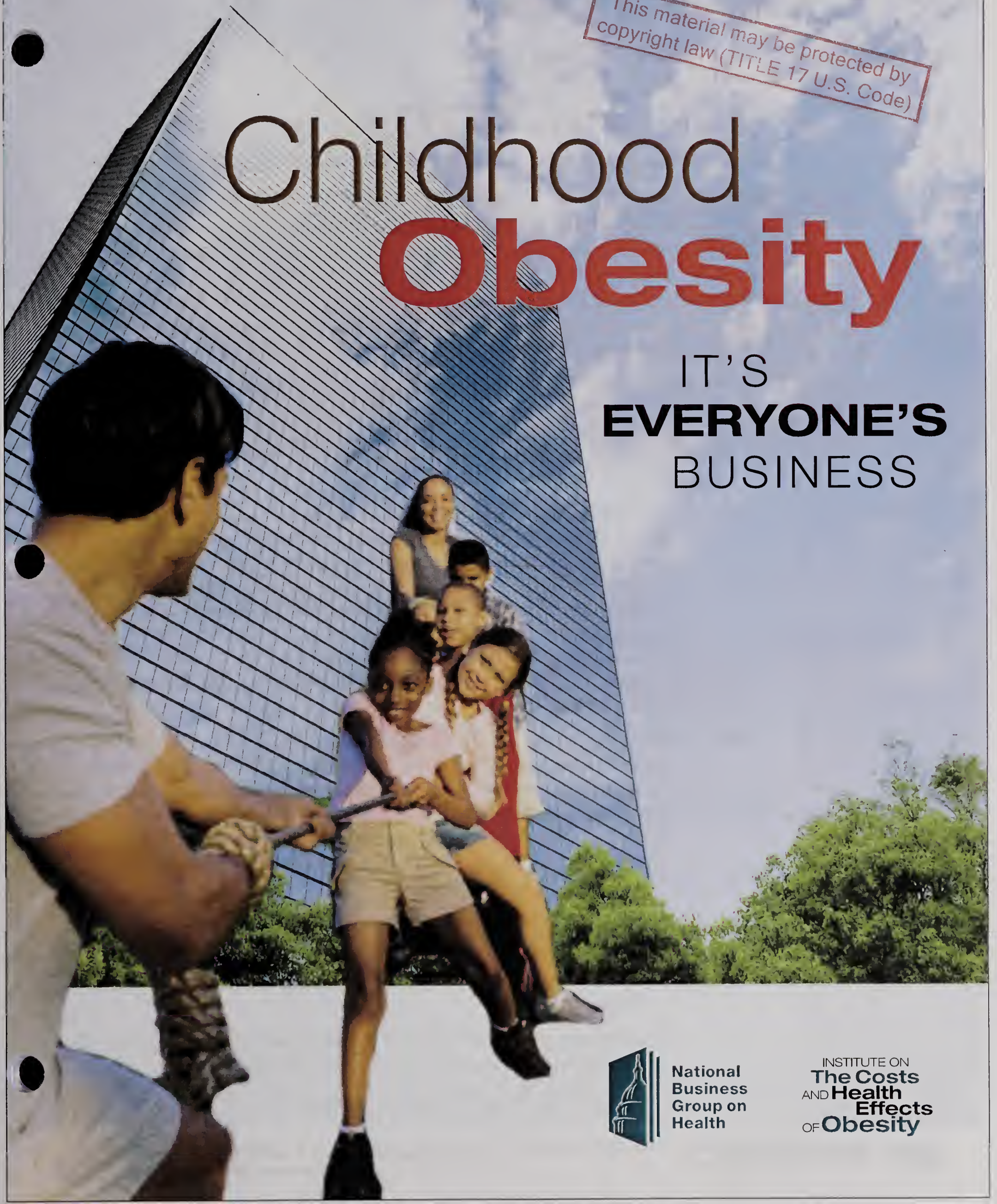
Childhood Obesity

IT'S EVERYONE'S BUSINESS



National Business Group on Health

INSTITUTE ON The Costs AND Health Effects OF Obesity

Childhood Obesity:

Separating Fact from Fiction

A national composite index developed by the Foundation for Childhood Development indicates that the overall health and well-being of children is 37% lower today than it was during the mid-1970s. One of the largest contributors to children's declining health is obesity.[1] Although many of the challenges posed by childhood obesity are well-known, it is important to be able to separate facts from fiction, as well as to know the definitions, statistics and key causes of the obesity epidemic.

Below is a list of statements about childhood obesity. Each is identified as either "fact" or "fiction," with an explanation of the evidence for the statement.

The U.S. now has the highest percentage of overweight youth in our nation's history.[2]

FACT This is true. Over the past 30 years, the prevalence of childhood obesity has nearly tripled.[3] Today, nearly 15% of American children and adolescents aged 2 to 19 years are considered overweight and an additional 16% are considered obese.[2] This amounts to approximately 24 million children and adolescents who are struggling with unhealthy amounts of excess weight.[4]

There are many factors that have contributed to the dramatic rise in childhood obesity.

FACT This is true. Changes in the eating and exercise habits of children over the last several decades are generally considered the major factors contributing to childhood obesity.[5] Increased reliance on vehicles for transportation and televisions or computers for entertainment has resulted in few children meeting physical activity guidelines. The increased availability of high calorie foods with low nutritional value has resulted in even fewer youth meeting daily dietary guidelines:[6]

- 65% of high school students do not meet daily physical activity guidelines, and 10% engage in no physical activity;
- 35% of high school students watch 3 or more hours of television each day;
- 25% of high school students play video games or use a computer recreationally for more than 3 hours each day; and
- 80% do not eat enough fruits and vegetables.

Figure 1: How Eating and Exercise Habits Contribute to Obesity

INCREASED CALORIC CONSUMPTION

- ⇧ Portion sizes
- ⇧ Convenience foods
- ⇧ Soft drinks and sugar-sweetened beverages
- ⇧ Fast food accessibility
- ⇧ Snack consumption
- ⇩ Fruit and vegetable consumption

DECREASED PHYSICAL ACTIVITY

- ⇩ School-based physical activity
- ⇩ Walking for transport
- ⇩ Outdoor play
- ⇧ Mechanical devices (e.g., leaf blowers) replace physical tasks
- ⇧ Computers and video games

The likelihood of childhood obesity can be influenced during pregnancy and the postpartum period.

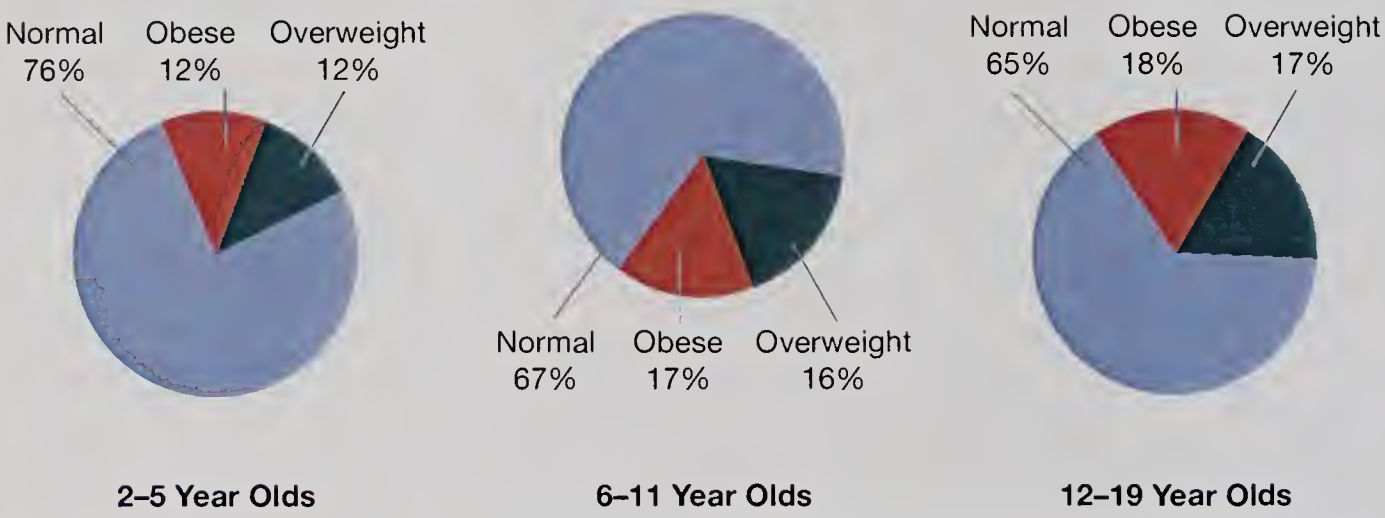
FACT This is true. Research suggests that a child is at higher risk for overweight if the mother is overweight during pregnancy.[7] Conversely, breastfeeding an infant during the first year of life may lower the risk of childhood obesity.[8]

The proportion of overweight and obesity is the same regardless of age, gender or ethnicity.

FICTION This statement is not true. While the prevalence of overweight and obesity is nearly equal for boys and girls,[2] the prevalence does vary by age and ethnicity.

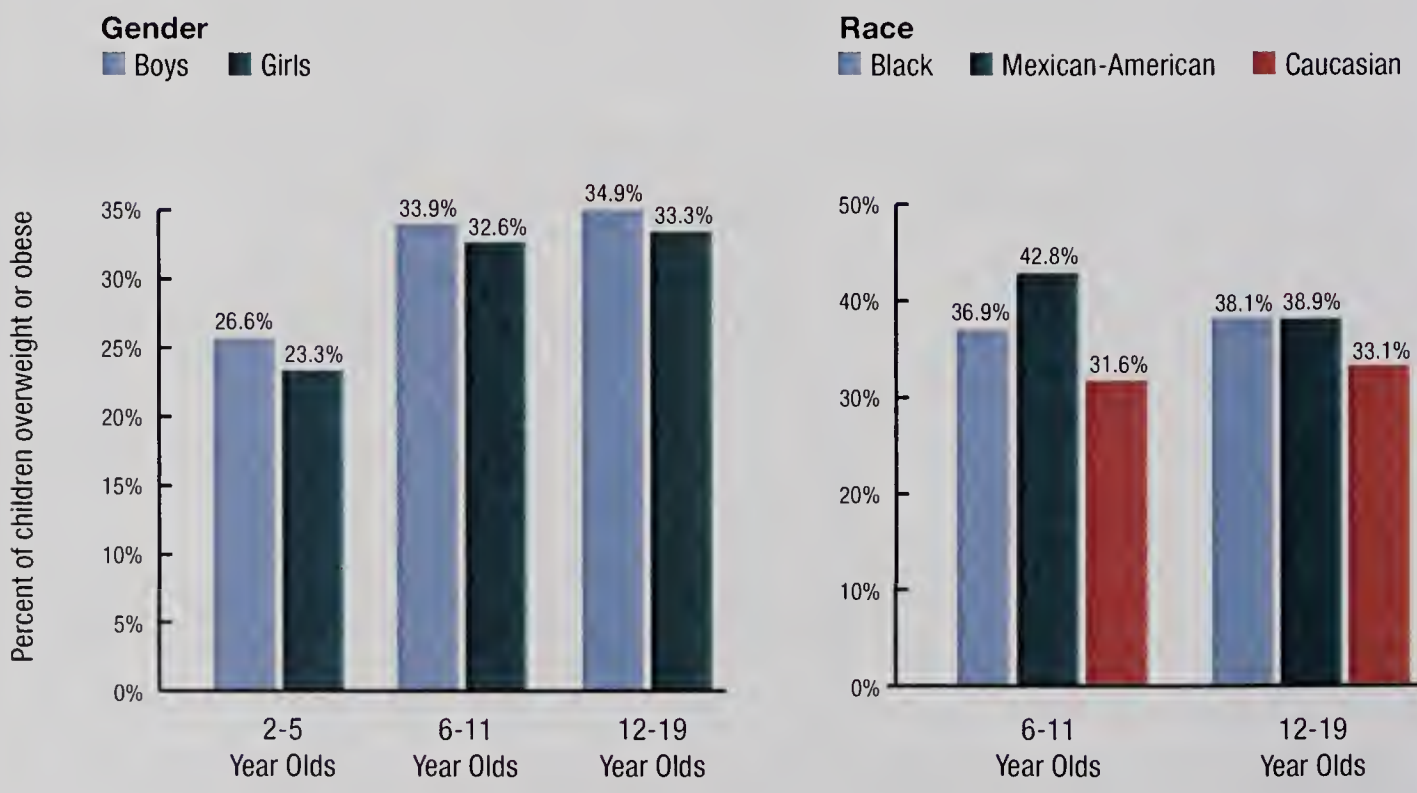
- ❖ Childhood obesity is more prevalent among 6-to-19-year-olds (34%) than 2-to-5-year-olds (24%)[2] (Fig. 2).
- ❖ More Mexican-American (38%) and African-American (35%) youth are overweight than white youth (30.7%)[2] (Fig.3).

Figure 2: Childhood Obesity by Age[2]



2–5 Year Olds **6–11 Year Olds** **12–19 Year Olds**

Figure 3: Childhood Obesity by Race and Gender[2]



Childhood obesity is the same no matter where a child lives.

FICTION This statement is not true. According to a 2009 report prepared by the Robert Wood Johnson Foundation, childhood obesity varies by state for a variety of reasons, including differences in the local environment and state and federal policies. For example, Mississippi has the highest rate of obese and overweight children (44.4%). Other southern states, including Georgia, Alabama, Tennessee and Kentucky, also have high rates of obese and overweight children compared to the rest of the country. Minnesota, Utah and Oregon have the lowest rates, with 20%-25% of children identified as overweight and obese.[9]

Parents often cannot tell if their child is overweight or obese.

FACT This is true. Over the course of normal growth and development, a child's body weight and height changes, so it is not always easy to tell if a child is overweight.

Parents should weigh their children on the bathroom scale to determine if they are overweight.

FICTION This statement is not true. Weighing a child on a bathroom scale is not a good idea. A scale does not accurately account for a child's height, age or gender.

The best way to find out if a child (between the ages of 2 and 20 years old) is overweight is to have a physician measure body mass index-for-age (BMI-for-age). A child's BMI is a relative measure of body weight based upon his or her gender, age and height.

To calculate BMI-for-age, a doctor will—

1. Obtain height and weight measurements.
2. Calculate BMI.
3. Plot BMI on appropriate BMI-for-Age Growth Charts.
4. Determine the percentile within which the BMI falls.
5. Find the weight category for the percentile.

-OR-

Utilize BMI Calculators Online

Table 1: Definitions of Body Mass Index (BMI) Percentiles*

IF A CHILD'S BMI IS...	IT MEANS THE CHILD...	AND IS CONSIDERED...
< 5th Percentile	...weighs less than 95 of 100 children	Underweight
5th –84th Percentile	...weighs less than 84 of 100 children	Healthy weight
85th Percentile	...weighs more than 85 of 100 children	Overweight
>95th Percentile	...weighs more than 95 of 100 children	Obese

**The BMI weight percentiles have been created by the U.S. Centers for Disease Control and Prevention and are based on a reference population using data from surveys and physical measurements that lag the current population statistics.*

Source: Age & Gender Specific Reference Population BMI Growth Charts from U.S. Centers for Disease Control and Prevention (http://www.cdc.gov/growthcharts)

Example: An 8-year-old girl who stands 4 feet 2 inches tall and weights 70 pounds would have a BMI of 19.7. This girl would be in the 91st percentile of all girls her age. This means she weighs more than 91% of her peers (based upon a reference population) and is considered overweight.

Illnesses associated with overweight and obese children occur in the short- and long-term.

FACT This is true. Many health conditions once considered adult problems are now being diagnosed among children. For example, Type II diabetes was once considered adult-onset diabetes. Today 8%-46% of new pediatric diabetes cases (Type I and Type II) are Type II.[10]

In one study, 70% of obese children 5 to 17 years old were already diagnosed with at least one cardiovascular risk factor (e.g., high blood pressure, high cholesterol) and 39% had two or more risk factors.[11]

Long-term, overweight and obese children and adolescents are at increased risk for the following illnesses and conditions:

- high blood pressure;
- Type II diabetes;
- elevated cholesterol;

- asthma;
- sleep apnea;
- menstrual irregularities;
- polycystic ovarian syndrome; and
- muscle and joint conditions.

Childhood obesity mainly impacts a child's physical health.

FICTION This statement is not true. Overweight and obesity have been shown to increase depression, anxiety and low self-esteem among children and adolescents.[12] Furthermore, obesity has been found to greatly impact the quality of life (QOL) among children. In one study, physical, emotional, social and school functioning were assessed among obese children, healthy children and children with cancer. As suspected, obese children had a lower QOL in all areas compared to healthy children. The QOL for obese children was found equivalent to that of children undergoing chemotherapy.[13]

Childhood obesity is not associated with adult obesity.

FICTION This statement is not true. Childhood obesity is both associated with and impacted by adult obesity.

Overweight and obese children are more likely to become obese adults. Among overweight and obese children 3 to 5 years old, there is a 40% chance of becoming an obese adult; overweight and obese adolescents 10 to 17 years old have a 74% chance of becoming an overweight adult.

Adult obesity can also increase the likelihood for child obesity. A child under the age of 5 is at least 3 times more likely to become an obese adult if one parent is obese; if both parents are obese, the likelihood increases to 13 to 15 times. Among older children, parental obesity can increase the likelihood of becoming an obese adult by 2 to 5 times.[14]

School policies and practices have a great impact on childhood obesity.

FACT This statement is true. Schools are a powerful force in children's lives. Ninety-seven percent of American children between the ages of 5 and 17 years old are enrolled in school.[15] No other institution has as much

continuous and intensive contact with children during their first two decades of life. Not only do children spend the majority of their day in school, 19%-50% of their daily food intake is consumed there.[16]

Over the last several years, significant improvements have been made to school nutrition and physical activity policies and practices. However, the most recent available statistics (2007) leave room for further improvement.

- 69% of elementary schools require some physical education classes, as do 84% of middle schools and 95% of high schools;[17] but *only 4% of elementary schools, 8% of middle schools and 2% of high schools provide daily physical education for all students.*[17]
- In 13% of elementary schools, 29% of middle schools and 58% of high schools, students could purchase soda or fruit drinks that are not 100% juice during lunch.[18]
- 12% of elementary schools, 25% of middle schools and 48% of high schools allow students to purchase foods or beverages high in fat, sodium or added sugars during lunch.[18]
- 33% of elementary schools, 72% of middle schools and 90% of high schools have vending machines, snack bars or other sources of snack foods outside the school meal programs.[18]

Conclusion

Childhood obesity is a growing problem in the United States, and its causes and consequences are extensive. Schools, child care facilities, communities and families have all contributed to the problem and all must contribute to its resolution. Health care providers and employers also have roles to play as part of a comprehensive solution. Therefore, it is clear that **childhood obesity is everyone's business!**

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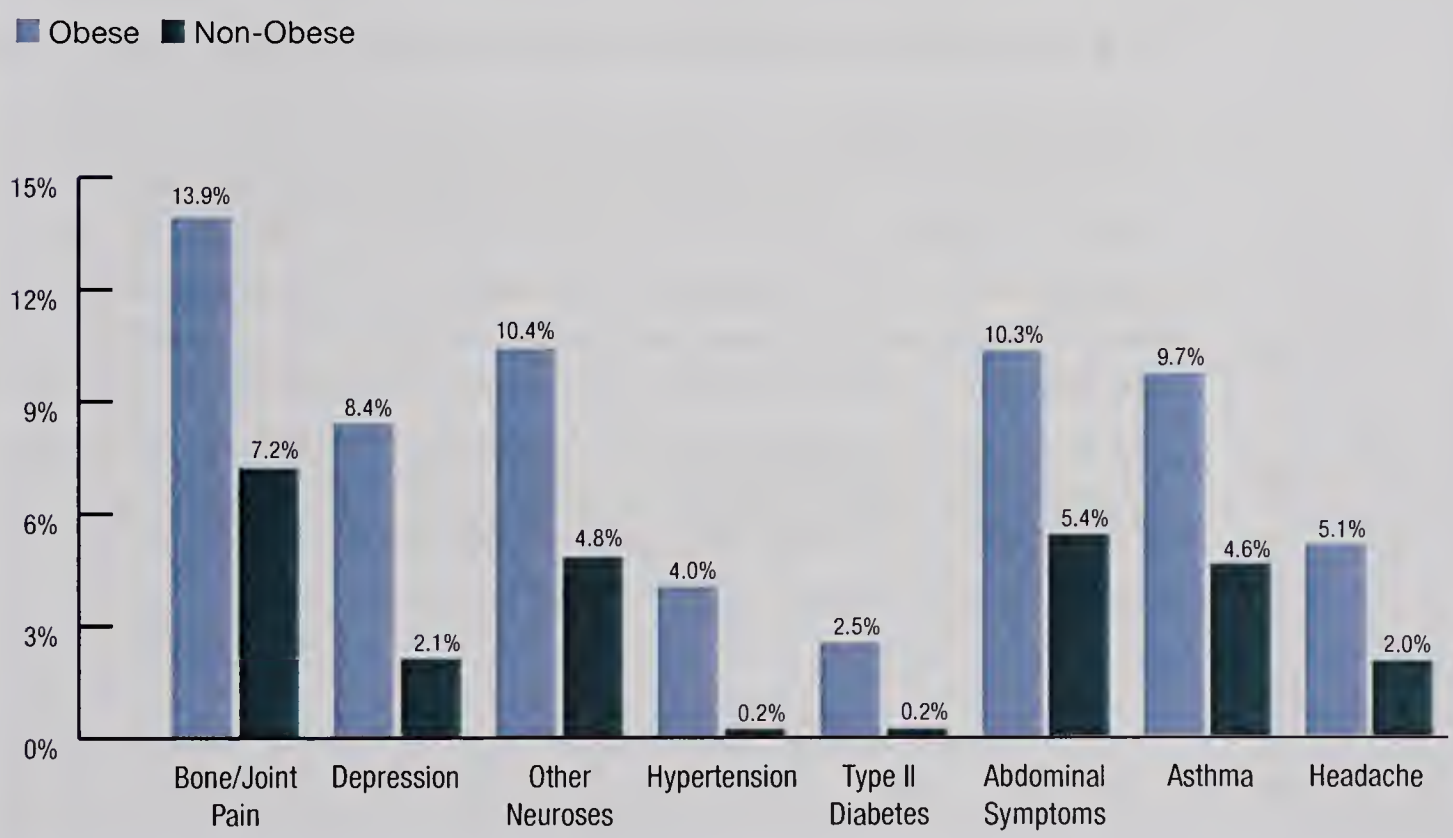
Three Ways Childhood Obesity Is Impacting Your Business

Approximately one-third of large employers' beneficiaries are dependents under the age of 25,[1] and children and adolescents are responsible for 14.7% of a typical large employer's health care costs.[3] As overweight and obesity increases among children, employers will be impacted in three ways.

1. Childhood Obesity Increases Health Care Utilization and Costs

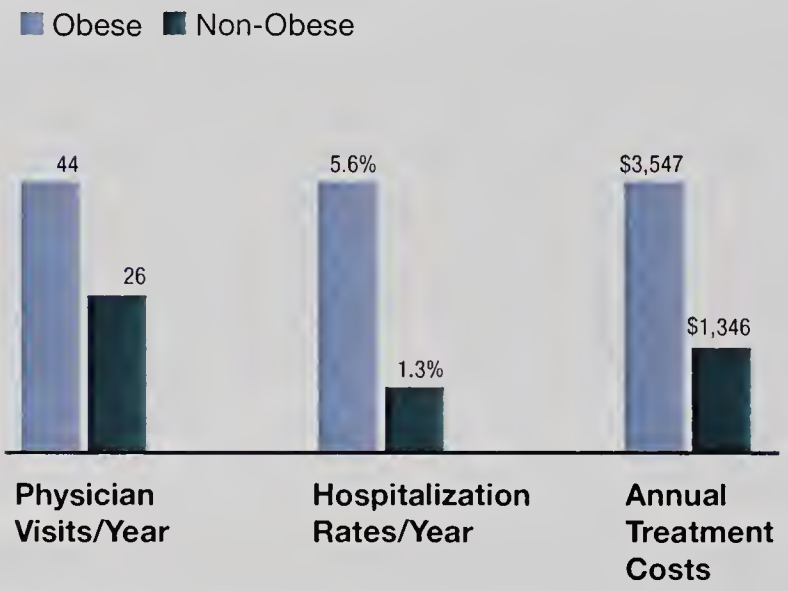
Diagnosis of illnesses attributable to overweight and obesity (e.g., hypertension, diabetes and depression) is no longer confined to adults. These illnesses are occurring concurrently with overweight and obesity in children, increasing the need for health care services in the short term. In 2006, a greater percentage of privately insured obese children received treatment for an array of health conditions compared to those children who were not obese. In some instances, the percentage of children who sought treatment was up to 20 times greater for obese children compared to non-obese children[2] (Fig. 1).

Figure 1: Percentage of Privately Insured Children Ages 0-17 Receiving Annual Treatment, 2006[2]



Overall, in 2006, obese children had nearly twice as many physician office visits and three times the hospitalization rate as non-obese children. The per person cost to private insurers for health care utilization was $3,547 and $1,346 for obese and non-obese children, respectively. In total, employers and other private insurers spent an estimated $9 billion on health care for overweight and obese children[2] (Fig. 2).

Figure 2: Utilization Rates and Medical Expenditures for Children with Private Insurance, 2006[2]



2. Poor Child Health Decreases Employee Productivity

For a variety of reasons, (e.g., social challenges, doctors' appointments for medical conditions, etc.), obese children have been found to miss significantly more days of school than average/underweight students.[4] Sick children can result in increased work tardiness, early departures from work and absenteeism among parents who must provide transportation or care for their child. On average, school-age sick children can cost employees 4 days away from work each year. The number is even higher for preschool-age children. Moreover, research has shown that parents who have a child in poor health do not perform as well at work as parents with healthy children and experience more work interruptions.[5, 6]

3. Children Are America's Future Workforce

Today's overweight and obese children constitute the workforce of tomorrow. Research indicates that obesity in childhood influences the likelihood of obesity in adulthood. An overweight toddler (3 to 5 years old) has a 40% chance of becoming an obese adult; an overweight teenager has a nearly 80% chance.[7] By 2030, it is estimated that up to 86% of Americans will be overweight and 51% will be obese.[8] The cost burden of treating this number of adults for obesity and its related illnesses has the potential to be catastrophic. Investing in childhood obesity today is an investment in America's corporate future.

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Benefits and Incentives Design: Aligning Stakeholders for Behavior Change

Until recently, there has been very little information for employers about appropriate benefit design for obesity. Medical professionals lacked a standard for identifying and treating obesity, and health plans often excluded obesity as an accepted diagnosis. However, new initiatives are laying the groundwork for change. Strategically designed benefits based upon these new initiatives will align stakeholders and enhance the likelihood for behavior change:

- Physicians will have incentives to identify and treat obesity early;
- Health plans will be held accountable for physicians' adherence to practice guidelines; and
- Families will participate in comprehensive activities to promote healthy living.

The following section details three ways in which employers can engage each stakeholder through benefits design or the use of incentives.

1. Support New Clinical Practice Guidelines to Improve Physician Care

In 2007, an expert panel convened by the American Medical Association (AMA), the Department of Health and Human Services' Health Resources and Services Administration (DHHS HRSA) and the Centers for Disease Control and Prevention (CDC) released new clinical practice guidelines to inform and standardize health care providers' role in preventing, identifying and treating childhood obesity. The new guidelines recommend that physicians assess a child's height, weight and BMI annually, as well as any medical and behavioral risk factors for obesity. Physicians also are encouraged to counsel patients on healthy behaviors necessary to maintain an ideal weight.[1]

When a child is identified as overweight or obese, four interventions of increasing intensity are recommended based upon an individual's weight status and response to earlier interventions:[1]

- **Prevention Plus** is the initial intervention recommended for overweight children *(BMI from 85th to 94th percentile).* Physicians should provide patient counseling to encourage a healthy diet and physical activity. Follow-up visits with the provider can be utilized based upon need.

Programs offering more intensive weight management are increasing and can be available in a medical or community-based setting. When looking for a weight management program, employees should seek a program with documented evidence of effectiveness. If no program is available locally, employees can be referred to their local children's hospitals for additional programs.

- **Structured Weight Management** is recommended for obese children *(BMI from 95th to 98th percentile)* or those for whom earlier intervention efforts (Prevention Plus) have not been effective. This approach combines more frequent physician follow-up — several times/month to weekly monitoring visits — with written diet and exercise plans to achieve gradual weight loss (1 pound/month) if clinically indicated.
- **Comprehensive Multidisciplinary Intervention** is utilized for obese children or for those who participated in 3 to 6 months of structured weight management and failed to achieve targets. This level of intervention combines more frequent visits (weekly) with a physician and a dietitian and could also include visits to exercise physiologists and behavioral specialists to achieve gradual weight loss of 1 to 4 pounds/month.
- **Tertiary Care Intervention** is the most intensive strategy recommended for morbidly obese adolescents *(BMI 99th percentile or greater)* with associated comorbidities or for individuals for whom earlier efforts were not effective. This approach consists of all that is contained in the previously described interventions, and may include more aggressive therapies, including meal replacements, pharmacotherapy and, in rare cases, bariatric surgery.

Employers can support and encourage physicians' adherence to the new guidelines by discussing the coverage of obesity and obesity-related services with their health plans. The key aspects of care recommended in the treatment guidelines are presented in Table 1.

NOTE: While few insurers currently reimburse claims with obesity as the sole diagnosis, changing policies over the last several years may pave the way for employers. Two examples of progressive health plan designs are from Blue Cross Blue Shield of North Carolina (BCBSNC) and Pennsylvania's Highmark health plan:

- In 2005, BCBSNC added obesity-related services as a standard benefit for beneficiaries. BCBSNC provides four physician office visits per year for weight assessment and treatment services, as well as visits to allied health professionals and nutritionists. For all services, physicians can code obesity as the diagnosis and reason for services.

Table 1: A Summary of Recommended Treatment Guidelines for Childhood Obesity

Health Service	BMI & Risk Factor Assessment	Counseling on Healthy Diet	Physician Follow-up Visits	Counseling Provided by Dietitians, Exercise or Behavioral Specialists	Meal Replacements, Medications or Bariatric Surgery
Prevention	X	X			
Prevention Plus		X	(as needed)		
Structured Weight Management†		X	X (monthly to weekly)		
Comprehensive Multidisciplinary Intervention*†		X	X	X	
Tertiary Care Intervention*†		X	X	X	X

*May require the employer to buy-up from standard plan designs.

†Employers may implement cost-sharing with member for these services.

- In 2006, Highmark began offering obesity-related services in their health plans to combat the high level of childhood obesity. Highmark offers overweight beneficiaries (BMI between 85th and 95th percentile) the following:[2]
  - two additional preventive service visits specifically for obesity and blood pressure management; and
  - two annual nutrition counseling visits.

For obese beneficiaries (BMI greater than 95th percentile), Highmark offers the same services as well as one set of laboratory tests.[2] Like BCBSNC, physicians can code obesity as a sole diagnosis when offering these services. According to Highmark, service utilization increased 23% within one year of implementing the change.[3]

In January 2008, **Costco Wholesale** removed the obesity exclusion from its self-insured health plan and began reimbursing for claims with this diagnosis. The new plan design provides reimbursement to physicians, dietitians or nutritionists and hospitals for the treatment of obesity, including the initial exam, diagnostic tests and ongoing visits for the purpose of monitoring and evaluating progress. Costco Wholesale believes this change will allow beneficiaries of all ages to seek and start treatment before they begin to experience comorbid conditions. Early numbers indicate that the new benefit is of use to beneficiaries. In its first year, nearly 250 child claimants received care for obesity, with equal numbers projected for 2009.

Employers can also support the inclusion of obesity-related services recommended by the Alliance Healthcare Initiative (see below).

The Alliance Healthcare Initiative

In 2009, the Alliance for a Healthier Generation, a joint collaboration between the American Heart Association and the William J. Clinton Foundation, announced its newest initiative, the Alliance Healthcare Initiative. The initiative brings together medical associations, employers and insurers in an effort to improve coverage for obesity prevention, assessment and treatment services.

Insurers and employer members of the Alliance agree to offer four visits with a primary care physician as well as four visits with a registered dietitian as part of their normal benefits available to beneficiaries. Physicians would be reimbursed for assessment and needed follow-up visits for counseling; dietitians also would be reimbursed for their services. The Alliance hopes that the provision of benefits will offer health care providers further incentive to take an active role in the fight against childhood obesity.

Insurers such as Aetna, Blue Cross of North Carolina, Blue Cross of Massachusetts and Wellpoint have joined the Alliance. Large employers such as PepsiCo, Owens Corning and PayChex also have joined the Alliance to offer improved benefits to their employees.

Employers interested in learning more about the Alliance Healthcare Initiative can visit the Alliance for a Healthier Generation website.

2. Incorporate New Performance Standards to Hold Health Plans Accountable

The National Committee for Quality Assurance has published a new measure within the Healthcare Effectiveness Data and Information Set (HEDIS) to improve the quality of care as it relates to childhood overweight and obesity. The new measure, *Weight Assessment and Counseling for Nutrition and Physical Activity for Children/Adolescents,* will assess patient medical records for evidence of the following:

BMI percentile documentation, which must include the following:

- ❖ date of the BMI;
- ❖ BMI percentile; and
- ❖ BMI percentile plotted on age-growth chart.

Documentation of nutrition counseling, which must include a note indicating the date and evidence of at least one of the following:

- ❖ a discussion of current nutrition behaviors;
- ❖ counseling or referral for nutrition education;
- ❖ educational materials on nutrition being provided; or
- ❖ anticipatory guidance for nutrition.

Documentation of physical activity counseling, which must include a note indicating the date and evidence of at least one of the following:

- ❖ a discussion of current physical activity behaviors;
- ❖ counseling or referral for physical activity education;
- ❖ educational materials on physical activity being provided; or
- ❖ anticipatory guidance for physical activity.

Health plans began collecting data on the new measure in 2009. The availability of this measure and corresponding data give employers the opportunity to evaluate health plans and incorporate new standards into plan requirements. Examples of key plan changes employers might implement are:

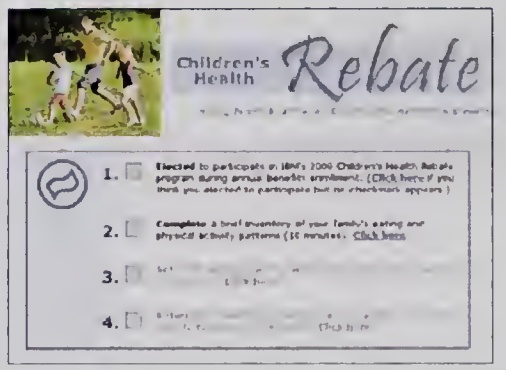
1. Require health plans to demonstrate high level of periodic BMI measurement and evaluation (calculating and plotting BMI) for all pediatric patients during office visits, as recommended by expert groups and published in the new HEDIS measures.

2. Evaluate health provider actions and efforts to deliver to parents and families regular guidance on nutrition and physical activity patterns, weight management and obesity prevention.
3. Require health plans to demonstrate improvement in these areas, if needed.
4. Consider discontinuing contracts with underperforming plans.

3. Engage Families with Incentives

More than half of large employers use financial incentives to encourage employees to participate in one or more types of health improvement activities.[4] Where possible, employers might consider extending incentives to family-based activities that can encourage healthy lifestyles and reduce childhood obesity. One such example is IBM's Children's Health Rebate.

IBM Children's Health Rebate



Approximately 45% of IBM employees have children covered by IBM-sponsored health plans. In 2008, the company launched its Children's Health Rebate program to help parents assist their children in maintaining a healthy weight. The 12-week web-based program includes a $150 cash rebate that rewards participation.

IBM created this unique, action-oriented program to promote simple activities for the entire family and to equip parents with tools and information that can be used easily in the home environment to address overweight and obesity.

The program focuses on the following four areas:

- Adequate physical activity;
- Consistent healthy eating;
- Appropriate screen time; and
- Positive parental role modeling.

Employees can elect to participate during the annual fall benefits enrollment. To earn the cash rebate, they also must fulfill the following online requirements:

1. Complete a brief family inventory to identify current eating and physical activity patterns within the family.
2. Set family action goals, such as preparing healthy meals together or engaging in outdoor physical activities.
3. Complete the family inventory again after 12 weeks.

Early data indicate employee interest as well as success. In its first year, more than 22,000 IBM employees elected to participate in the Children's Health Rebate program. Of those, 14,000 employees completed the first two requirements for the rebate: the online family inventory and their 12-week action goals. More than 11,000 employees com-

(continues on page 7)

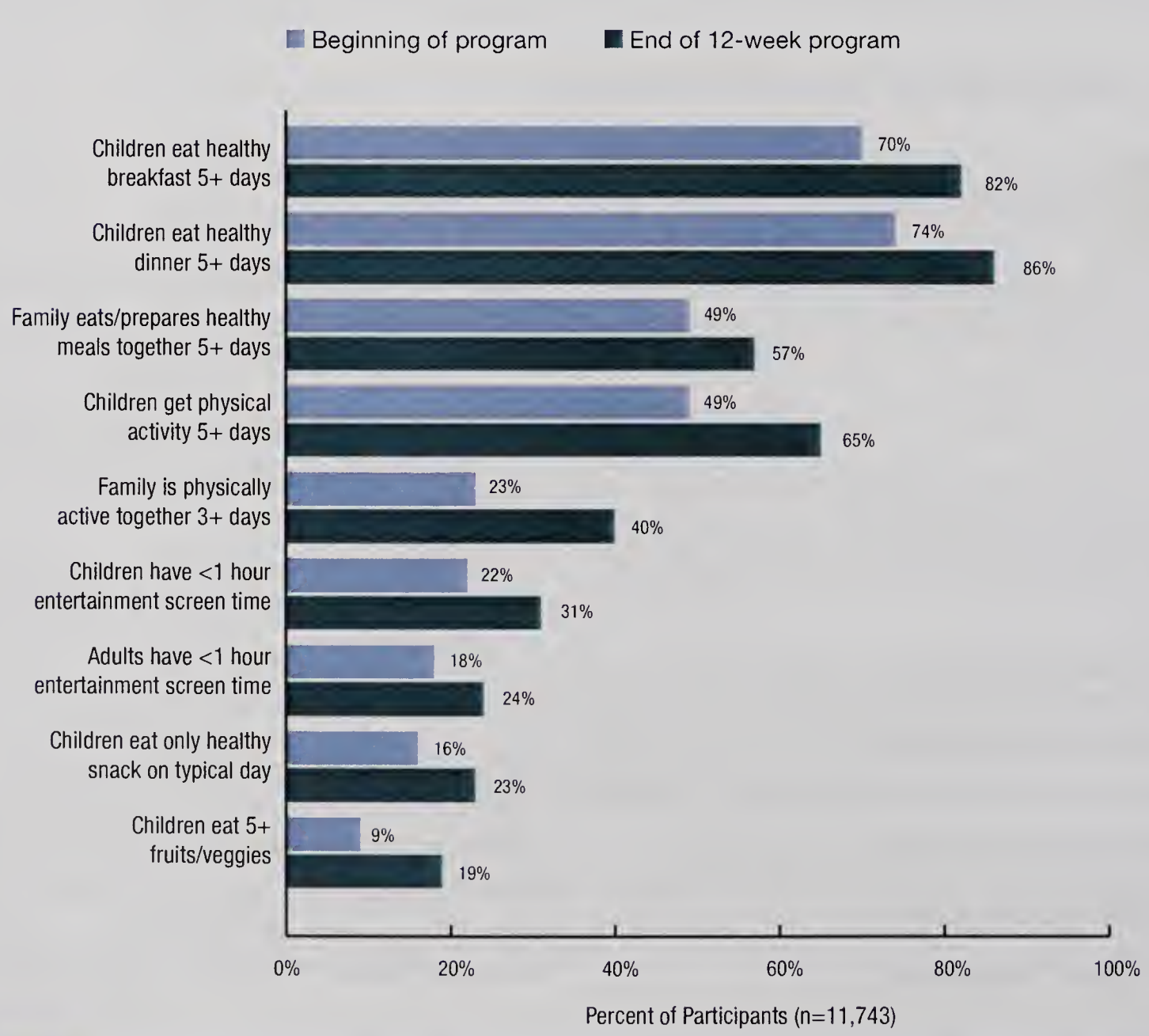
IBM Children's Health Rebate *continued*

pleted the follow-up inventory at 12 weeks and earned their $150 rebate.

Program evaluation revealed the following successes:

- Two thirds of employees who participated in the program reported that their children were exercising more or maintaining appropriate physical activity levels.
- Fifty-nine percent of children and 64% of adults improved body weight or maintained a healthy weight.
- Both parents and children showed improvement in healthy eating and physical activity behaviors, as well as a reduction in screen time (see Fig. 1).

Figure 1: Changes in Behavior as a Result of the IBM Children's Health Rebate Program



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Weight Management Programs with Supporting Evidence

Many employees may be struggling with a child who is already overweight or obese. When overweight or obesity is accompanied by one or more serious weight-related medical conditions such as diabetes, high blood pressure or sleep apnea, a doctor may recommend a more structured weight management program for the child.

The table below provides examples of weight management programs that have had some degree of success. Employers might utilize this list to provide guidance to employees seeking assistance.

Table 1: Suggested Weight Management Programs

Program Name	Grade/Age	Contact Information
KidShape®	Ages 3 to 5 years old Ages 6 to 14 years-old Grades Pre-K through 8th	Website: Kidshape.com KidShape® 8733 Beverly Blvd Suite 400 Los Angeles CA 90048 Phone: 1-888-600-6444 Email: info@kidshape.com
SHAPEDOWN	Four program levels: Level 1 (6 to 8 years old) Level 2 (9 to 10 years old) Level 3 (11 to12 years old) Level 4 (13 to 18 years old)	Website: www.Shapedown.com SHAPEDOWN 1323 San Anselmo Avenue San Anselmo, CA 94960 Phone: 415-453-8886 Email: www.shapedown@aol.com
Univ. of Buffalo Childhood Weight Control Program	Grades K-5 Ages 6 to 12 years old	Colleen Kilanowski Program Coordinator SUNY Buffalo G-56 Farber Hall South Campus Buffalo, NY 14260 Phone: 716-829-3400 Email: ckk@buffalo.edu

(continues on page 10)

Table 1: Suggested Weight Management Programs continued

Program Name	Grade/Age	Contact Information
HealthWorks!™	Ages 5 to 10 years old Ages 11 to 19 years old	Website: www.cincinnatichildrens.org/svc/prog/healthworks/default.htm HealthWorks! 3333 Burnet Avenue Cincinnati, OH 45229-3139 Phone: 513-636-4305 Fax: 513-636-2459
Operation Zero	An Obesity Management Program for Adolescents	Luke Beno, MD Director, Operation Zero Kaiser Permanente Atlanta, GA Phone: 770-603-3604 Fax: 770-603-3674
L.E.S.T.E.R.® (Let's Eat Smart, Then Exercise Right)	Ages 6 to 11 years old	The Children's Hospital of Alabama 1600 7th Avenue South Department of Clinical Nutrition ACC Suite 416 Attention: Sue Teske, MS, RD, CNSD Birmingham, AL 35233 E-mail: Susan.Teske@chsys.org
FIT KIDS	Children ages 6 to 12 years old, their parents and caregivers	Beth Passehl FIT KIDS Community Health Development and Advocacy Children's Health Care of Atlanta Atlanta, GA Phone: 404-929-8793 E-mail: beth.passehl@choa.org
A Weigh of Life	Children and adolescents	Website: www.texaschildrenshospital.org Texas Children's Hospital Nutrition and Gastroenterology Dept. Texas Children's Hospital 6621 Fannin St. MC 3391 Houston, TX 77030-2399

(continues on page 11)

Table 1: Suggested Weight Management Programs continued

Program Name	Grade/Age	Contact Information
Healthy Habits (HH)	Adolescents	B.E. Saelens Department of Pediatrics Division of Psychology Children's Hospital Medical Center Cincinnati, OH 45229 E-mail: brian.saelens@chmcc.org
Healthy You	Ages 8 to 11 years old Teens	Website: www.chkd.org/healthy_you Babs Benson, RN, BSN Children's Hospital of the King's Daughters 601 Children's Lane Norfolk, VA 23507 CHKD Healthy You Program Coordinator Phone: 757-668-7035 E-mail: bensonbr@chkd.org
On Target	Families of overweight teens	Marc Jacobson, MD Director, On Target Program Schneider Children's Hospital Division of Adolescent Medicine 410 Lakeville Road, Suite 108 New Hyde Park, NY 11040 Phone: 516/718-465-3270

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Employee Education:

Equipping Employees for the Battle

Parents have an enormous impact on the childhood obesity epidemic. A child under the age of 5 is at least 3 times more likely to become an obese adult if one parent is obese; if both parents are obese the likelihood increases to 13 to 15 times. Among older children, parental obesity can increase the likelihood of becoming an obese adult by 2 to 5 times.[1]

Employers can play a critical role in fighting the childhood obesity epidemic by equipping parents with the information they need, when they need it.

Employers can provide educational materials as appropriate to do the following:

1. **Help employees** develop healthy family lifestyles in the home (see *How Can I Keep My Child at a Healthy Weight?*);
2. **Educate employees** about what to do if their child is overweight (see *What If My Child Seems Overweight?*);
3. **Provide tools** and information to optimize employee partnerships with health care providers (see *What Should Happen at the Doctor's Office?*);
4. **Refer parents** to child care services and providers that meet nutrition and physical activity recommendations (see *What Should I Look for in Child Care?*).

Employers can also look to external organizations for additional resources. For example, state health departments can be a valuable resource and partner for childhood obesity and physical activity materials.

Employers can educate employees by hosting seminars or education classes to help families develop healthy lifestyles in the home, such as those offered through the "Families Step Up" program at Baptist Health South Florida (see pg. 2).

Baptist Health South Florida: "Families Step Up"

Baptist Health South Florida

Baptist Health South Florida introduced "Families Step Up" in September 2006. The 6-week program, offered twice a year, is designed to teach healthy eating and physical activity skills to the entire family. The families learn together and provide each other with support in making healthy behavior changes.

For the 6 weeks, families work to reach their nutritional and physical activity goals. At the start of the program, all participants undergo a series of health screenings that include height and weight, BMI, cholesterol, HDL cholesterol and blood pressure. These measurements are repeated in 12 weeks at a follow-up session.

Since 2006, the program has been offered 5 times, and 28 families have taken part. Twenty-one of the 28 families (75%) attended all sessions. Of these 21 families, 12 (33 individual participants) provided measurable data by attending the follow-up session, resulting in a 57% completion rate.

Behavior Changes Noted

Health behavior changes were noted in all 12 families. A change was considered positive if there was a decrease in BMI, a decrease in total cholesterol, an increase in HDL, a decrease in cholesterol/HDL ratios or a decrease in blood pressure.

Among the 12 families, the following results were found:

- 8 (24%) participants were found to have one improvement in the health measures tested;
- 7 (21%) participants were found to have an improvement in two health measures;
- 9 (27%) participants had three measurable health improvements;
- 7 (21%) participants had four noted changes; and
- 2 (6%) of the 33 participants had improvements in all five health metrics.

Of the 12 families who completed the entire program, 10 had the involvement and support of both parents. Families with two parents involved typically had a higher number of health improvements than the families with a single parent enrolled in the program.

Baptist Health South Florida has determined that a 6-week nutrition and physical activity program, which targets all family members, can result in healthy behavior changes. Most importantly, the success rate is higher when all family members are involved.

Reference

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CHILDHOOD OBESITY

Facts for Families

How Can I Keep My Child at a Healthy Weight?

You can help keep your child at a healthy weight and prevent obesity by encouraging and modeling a healthy lifestyle, which includes a nutritious diet and exercise. The first step in reaching this goal is learning about diet and exercise recommendations and then setting goals for your child and family. Small changes can have big health benefits and will start your family on a course for better lifelong health.

What can I do to make sure my child is eating well?

It can be hard to decide what information to use when planning your child's food intake. The most important things to understand are the foods your child should be eating to get the nutrients needed to grow, and in what quantities. According to the United States Dietary Guidelines, children should do the following:

- Consume whole-grain products often; at least half the grains (e.g., breads, cereals, rice, crackers, etc.) should be whole grain.
- Consume 2 cups per day of fat-free or low-fat milk or equivalent milk products for children 2 to 8 years old. Children 9 years of age and older should consume 3 cups per day of fat-free or low-fat milk or equivalent milk products.
- Keep total fat intake between 30%-35% of calories for children 2 to 3 years old and between 25%-35% for children and adolescents 4 to 18 years old. Most of the fat consumed should come from sources of polyunsaturated and monounsaturated fatty acids, such as fish, nuts and vegetable oils.
- Consume sufficient amounts of fruits and vegetables.

You also can help prevent your child from becoming overweight or obese by following these guidelines:

- Minimize sugar-sweetened beverages to no more than 1 per day;

You can help make sure your child is receiving the correct amount of nutrients by learning how to read nutrition labels on food packaging and how to decode serving sizes.

For help click here.

- Minimize sodium intake to less than 2,300 mg (approximately 1 tsp of salt) per day;
- Prepare and eat meals at home 5 or 6 times/week;
- Provide a healthy breakfast every day; and
- Breastfeed during your child's first year of life and exclusively for the first 6 months.

What type and how much exercise should my child get?

Your child should get a mix of structured and unstructured physical activity each day. Structured play may include sports, games, weight lifting and gym classes. Unstructured physical activity is the type of exercise your child gets through everyday play. The recommended amount of each type of exercise depends on your child's age.

Toddlers 1 to 3 years old

- Toddlers should get 30 minutes of structured physical activity and at least 1 hour of unstructured activity on most days of the week.
- Toddlers should not be sedentary for more than 60 minutes at a time.

Preschoolers 3 to 5 years old

- Preschoolers should get 1 hour of structured activity and at least 1 hour of unstructured physical activity each day on most days of the week.
- Preschoolers should not be sedentary for more than 60 minutes at a time.

Children 5 to 18 years old

- Children should get a mix of moderate and vigorous physical activity for at least 60 minutes every day, up to several hours.
- Bouts of physical activity should last 15 minutes or more several times throughout the day.
- Periods of inactivity should last no more than 2 hours.

Why is physical activity so important? Don't kids exercise naturally?

Children today exercise less than ever before. Not only are they driven almost everywhere they go, but schools are offering fewer gym classes, and television, video games and computers have become the entertainment of choice for children. The combination of these factors has resulted in very sedentary lifestyles.

Do the new video games that incorporate exercise count as physical activity?

The new so-called 'exergames' or 'exertainment' may not be the perfect alternative to old-fashioned outdoor play, but they do offer benefits. A recent study showed that active bowling and running games increase a child's heart rate by 20 to 79 beats per minute and burn calories. Compared to resting, children between the ages of 6 and 12 years old burned:

- 39% more calories by playing a standard video game;
- 98% more calories by playing an active bowling game; and
- 451% more calories by engaging in an active running game.[1]

While video games can provide some physical activity, they are typically low intensity and should not be used to replace all exercise. More intense, vigorous exercise is still necessary.

What can I do to help my child become more active?

To raise a healthy child, it is important to be a healthy parent. Tools such as the Healthy Home Self-Assessment and Action Plan[6] (see Fig. 1) can help you evaluate whether your child is getting the physical activity and nutrition needed, and how family behaviors may be contributing. The Action Plan allows you to set goals for yourself, your child and your family (see Fig. 2).

Are some exergames better than others?

Popular exergames include *Nintendo Wii, Dance Dance Revolution, In the Groove, EyeToy: Kinetic, Yourself!Fitness, Guitar Hero* and *Rock Band.* Below is a look at the evidence for those games that have been studied.

- **Dance Dance Revolution** (DDR) requires players to use dance steps to match images on the screen. Dancing becomes harder and faster as the player advances to higher levels. A 2005 study of 11-to-17-year-olds showed that even at the "easiest" levels of the game, players' heart rates increased enough to provide adequate cardio benefits.[2] Another study of teenagers found that playing DDR doubled participants' heart rates and sustained an effective aerobic workout for more than 45 minutes.[3] A study of school-aged children in West Virginia found that many children lost 5-10 pounds after playing DDR every day for several weeks.[4]
- **In the Groove** (a dance game similar to DDR) has been shown to increase students' mile-run time by 14% after regular use.[5] Students playing this game also showed improvements in social skills, academics, attention and self-esteem.
- For younger children (ages 3 to 6 years old), Fisher-Price's **SmartCycle** provides similar health benefits by combining interactive animation technology with a stationary bicycle. The bike plugs directly into a television, and as kids pedal faster, they are guided though educational "adventures" on the screen. The SmartCycle provides moderate cardiovascular and health benefits.
- Other programs, including **Yourself!Fitness** and **EyeToy,** are intended to offer a cardiovascular workout by utilizing a virtual trainer and customized workouts based on the user's ability, mood and other characteristics.

Figure 1: Weight Watchers Healthy Home Self-Assessment[6]

Healthy Eating
On average, my children eat ____ fruits and/or vegetables in a typical day. [Selections = No (0), Not many (1-2 cups), Some (3-4 cups), Lots of (5+ cups), Not applicable] Optimal level is some or lots.
On average, my children eat ____ unhealthy snacks, unhealthy convenience foods, and/or soda in a typical day. [Selections = A lot of (5+ cups), Some (3-4 cups), Not much (1-2 cups), No (0 cups, Not applicable] Optimal level is not much or no.
On average, my children eat a healthy breakfast ____ in a typical week. [Selections = Never, Very little (1-2 times), Some of the time (3-4 times), Most of the time (5-7), Not applicable] Optimal level is most of the time.
On average, my children eat a healthy dinner ____ in a typical week. [Selections = Not very often (0-2 times), Some of the time (3-4 times), Most of the time (5-7), Not applicable] Optimal level is most of the time.
Physical Activity
On average, my children get _____ of physical activity in a typical week. [Selections = No, Very little (e.g., 30-60 minutes 1-2 days/week), Some (e.g., 30-60 minutes 3-4 days/week), A lot of (e.g., 30-60 minutes 5-7 days/week), Not applicable] Optimal level is a lot.

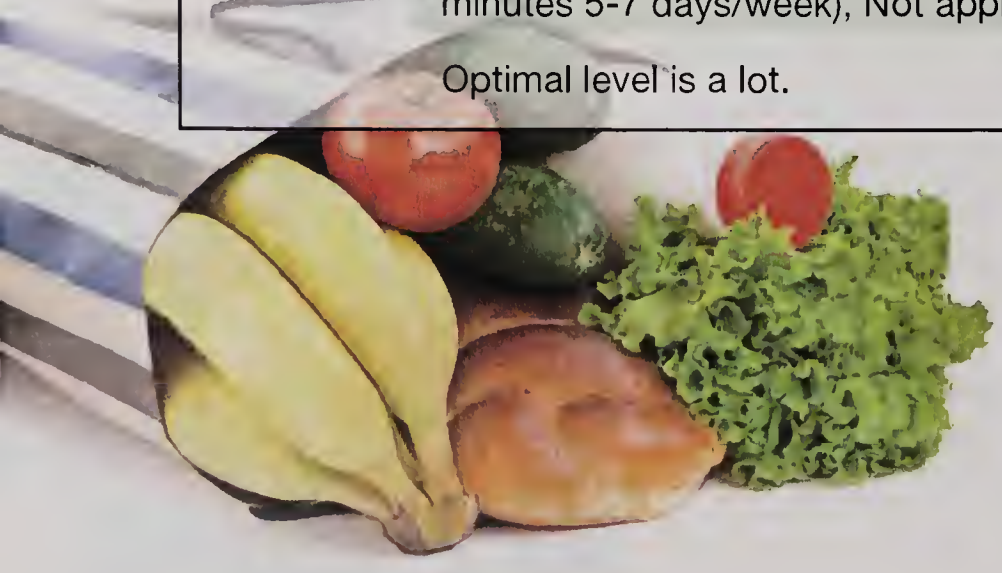

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Figure 1: Weight Watchers Healthy Home Self-Assessment[6] continued

Screen Time
On average, my children have ____ entertainment screen time (e.g., TV, video games, non-homework computer use) in a typical day. [Selections = A lot of (3+ hours), Some (1-2 hours), Very little (less than 1 hour), No, Not applicable] Optimal level is some or very little.
Role Modeling
My family eats and/or prepares healthy dinner's together ____ in a typical week. [Selections = Never, Very little (1-2 times), Some of the time (3-4 times), Most of the time (5-7), Not applicable] Optimal level is some or most of the time.
My family is physically active together ____ in a typical week. [Selections = Never, Very little (1 time), Some (2 times), A lot (3+ times), Not applicable] Optimal level is a lot.
On average, adults in my family have ____ entertainment screen time (e.g., TV, video games, non-work computer use) in a typical day. [Selections = A lot of (3+ hours), Some (1-2 hours), Very little (less than 1 hour), No, Not applicable] Optimal level is some or very little.

Figure 2: Weight-Watchers Action Plan[6]

SET FAMILY ACTION GOALS		
Healthy Eating		
Fruits/Vegetables		Eat at least 5 servings of fruits and/or vegetables per child per day.
		Eat at least 3 servings of fruits and/or vegetables per child per day.
		Buy fresh fruits and vegetables each week.
		Visit the local farmer's market each week.
Unhealthy Choices		Limit unhealthy snacks to 1 serving per child per day.
		Limit unhealthy snacks to 3 servings per child per day.
		Limit soda or other high-sugar drinks to 1 per child per day.
		Make it easier for children to choose healthy snacks.
		Limit unhealthy convenience foods to 3 times per week.
		Limit unhealthy snacks bought at the grocery store to 1 item per trip.
		Children bring healthy lunch to school at least 3 times per week.
Healthy Meals		Limit eating out to 3 times per week.
		Children eat a healthy breakfast every day.
		Serve appropriate portion sizes at all meals.
		Increase involvement in promoting healthy food options in our schools.
		Replace unhealthy desserts with more nutritious options (e.g., fruit, sorbet) at least 3 times per week.

(continues on page 7)

Figure 2: Weight-Watchers Action Plan[6] continued

SET FAMILY ACTION GOALS		
Healthy Eating *continued*		
Healthy Meals *continued*		Plan healthy meals in advance for the upcoming week.
		Purchase items for healthy meals in advance each week.
		Prepare healthy meals in advance (and freeze them if needed) each week.
		Make it easier for my child to choose healthy snacks.
		Increase my involvement in healthy meals (work with schools to improve healthy options).
Physical Activity		
		Walk children to school, church, library, or other destination you would normally drive to at least once per week.
		Let each child choose a physical activity the whole family can participate in at least once per week.
		Make walking the dog the children's or whole family's responsibility each week.
		Create active alternatives for children not interested in structured sports.
		Reward children for good behavior with their choice of fun physical activities (e.g., batting cages, bowling) each week.
		Make active indoor and outdoor chores the children's or whole family's responsibility (e.g., vacuuming, mowing) each week.
		Create active alternatives for kids who are not interested in structured sports.

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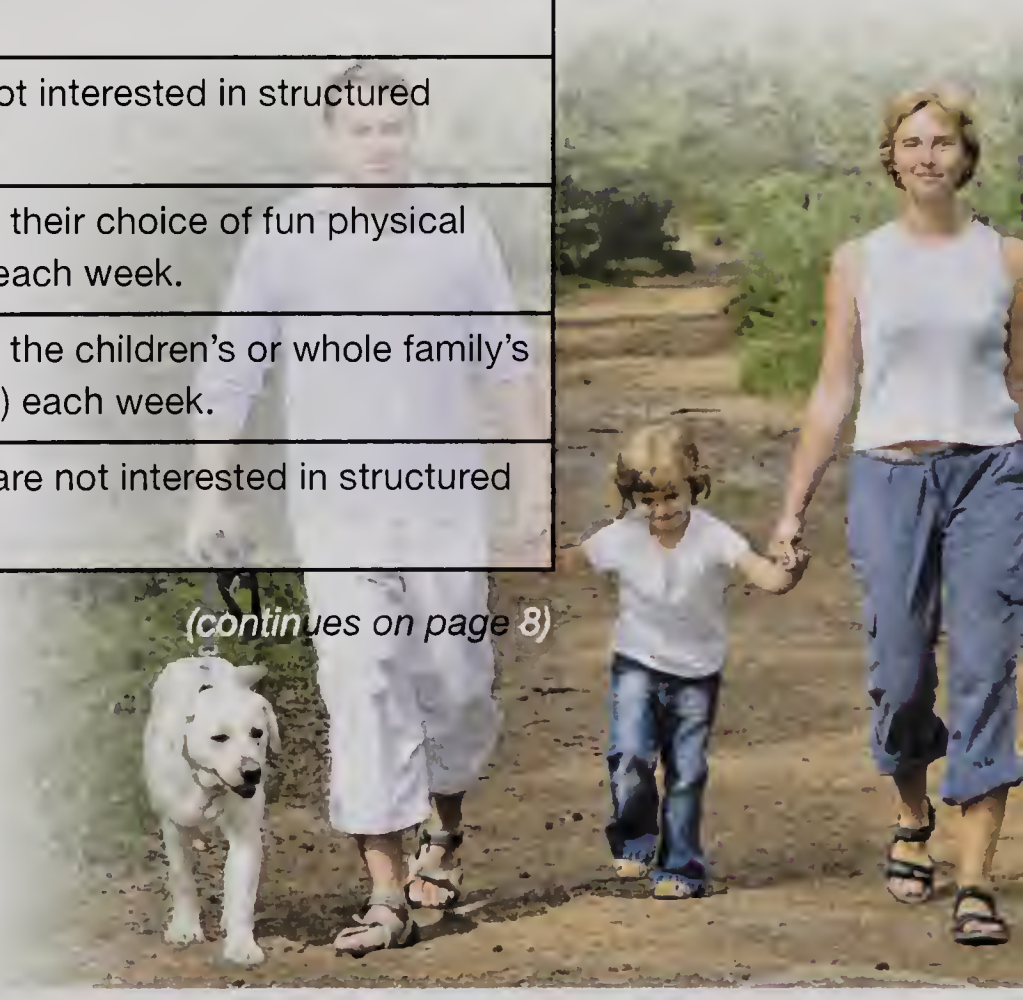

Figure 2: Weight-Watchers Action Plan[6] continued

SET FAMILY ACTION GOALS		
Screen Time		
		Manage family free time without excess screen time (sharing responsibility of this with children).
		Limit total entertainment screen time to 2 hours per child per day.
		Make habit of having family use one centrally located TV.
		Limit TV time to 2 hours per child per day.
		Limit video game time to 30 minutes per child per day.
		Limit entertainment computer time to 30 minutes per child per day.
Role Modeling		
Healthy Eating		Eat healthy family dinners together at least 3 times per week.
		Involve children in healthy meal preparation at least once per week.
		Take children grocery shopping to choose healthy options at least once per week.
		Adults eat at least 5 servings of fruits and/or vegetables per day.
		Adults limit junk food to 1 serving per day.
		Adults eat a healthy breakfast at least 5 times per week.
		Adults bring a healthy lunch to work at least 1 time per week.
		Adults eat nutritious after-dinner snacks at least 5 times per week.

(continues on page 9)

Figure 2: Weight-Watchers Action Plan[6] continued

SET FAMILY ACTION GOALS		
Role Modeling *continued*		
Physical Activity		Go on a family walk, bike ride, or other activity at least once per week.
		Participate with your children at sports practices each week.
		Adults maintain their own physical activity routine: at least 30 minutes of moderate intensity physical activity most days of the week.
		Take an active part in limiting overuse injuries in my child by focusing my child on sportsmanship, teamwork and adding a variety of activities to their day.
Screen Time		Adults limit total entertainment screen time to 2 hours per day.
		Adults limit TV time to 2 hours per day.
		Adults limit TV time to 1 hour per day.
		Manage the family's free time better (allow child to entertain themselves [i.e.,play, read, color, etc).
		Limit the number of TV's in the house and make a habit of using one centrally located TV.

References

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CHILDHOOD OBESITY

Facts for Families

What If My Child Seems Overweight?

Overweight or not?

Don't trust your eyes. It's not always easy to tell. Over the course of normal growth and development, your child's body fat and height changes. This means you can't necessarily tell if he or she is overweight merely by appearance.

How will I know?

The best way to find out if your child between the ages 2 and 20 is overweight is to have a physician measure Body Mass Index-for-age (BMI-for-age). Body Mass Index, or BMI, is a measure of body weight based upon gender, age and height.

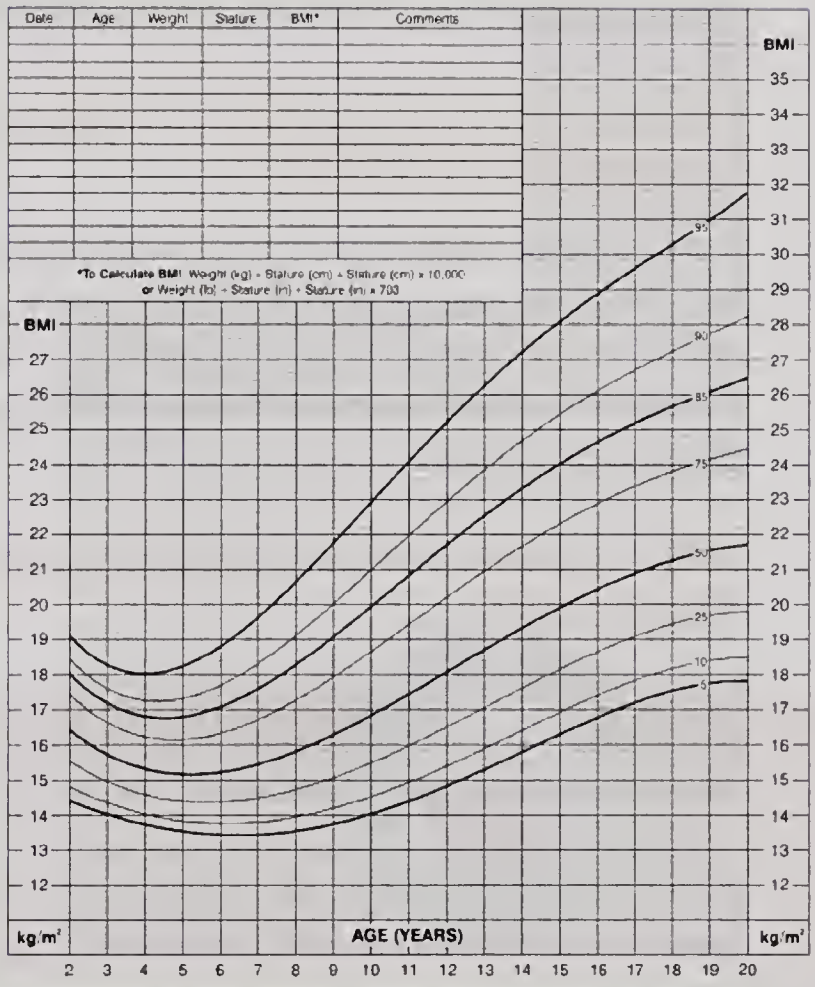
Your doctor will calculate your child's BMI based on his or her height and weight. Once calculated, the BMI will be plotted on a gender-specific chart to identify your child's specific percentile of growth (see Fig. 1).

For example, an 8-year-old girl with a BMI of 15 would be near the 25th percentile for her age and gender.

What is considered overweight?

Health care professionals use the following percentile cutoff points to identify underweight and overweight in children (see Table 1).

Figure 1: A Sample BMI–for-Age-Gender-Specific Chart



To view growth charts for all ages, please visit the Centers for Disease Control and Prevention (CDC) website.

Table 1: Definitions of BMI Percentiles

IF YOUR CHILD'S BMI IS...	IT MEANS YOUR CHILD...	AND IS CONSIDERED...
< 5th Percentile	...weighs less than 95 of 100 children	Underweight
5th –84th Percentile	...weighs less than 84 of 100 children	Healthy weight
85th Percentile	...weighs more than 85 of 100 children	Overweight
>95th Percentile	...weighs more than 95 of 100 children	Obese

Source: Based on Age & Gender Specific Reference Population BMI Growth Charts from the U.S. Centers of Disease Control and Prevention

Why can't I just weigh my child on the bathroom scale?

The bathroom scale cannot determine your child's age, height or gender. BMI provides a more standard measure of body weight regardless of height. BMI also can help you monitor your child's weight patterns over time.

What should I do if I learn my child is overweight?

If your child is overweight or at risk for becoming overweight, your family's health care provider should initiate a plan to help your child achieve a healthy weight. This usually entails a more complete examination of your child as well as questions about the family's eating and physical activity habits.

Should my child go on a diet?

In most cases, no. Your child is still growing, and it is important that he or she gets the required nutrients from a healthy diet. Diets can increase weight problems over the long term and create unhealthy weight loss practices, unrealistic body images and damaged self-esteem.

For most overweight children, the recommended goal is not to lose weight but rather to stop or slow weight gain. As the child continues to grow, a healthy balance between height and weight is eventually achieved.[2] Many overweight children gained too much weight largely because of the unhealthy foods they were fed. Therefore, it is crucial that parents be part of the solution. A health care provider treating an overweight child

will usually work with the entire family by encouraging better eating habits as well as healthier levels of physical activity.

If your child is overweight and has one or more serious weight-related medical conditions, such as diabetes, high blood pressure or sleep apnea, your doctor may feel that weight loss is needed. In such cases, more structured weight management interventions may be recommended to help reduce his or her weight by about 1 pound per month until a healthy weight is achieved.

How can I speak with my child about his or her weight?

Speaking with your child is not always easy. You should remain positive and avoid negative messages that might be damaging to your child's well-being. Being labeled as overweight or obese can negatively impact your child's self-concept and result in disordered eating.

Whenever you speak with your child about his or her weight, the message should be realistic, nonjudgmental and actionable. Experts say that parents should focus conversations on healthy eating, active living and positive self-esteem rather than on achieving a specific body weight.

Reference

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Eating Disorders

Eating disorders are serious, potentially life-threatening conditions characterized by self-starvation, excessive weight loss, binge eating and cycles of binge eating and self-starvation.

While eating disorders may begin with preoccupations with food and weight, they are usually about much more than food. Eating disorders often arise from a variety of physical, emotional, social and familial issues, all of which need to be addressed as part of a treatment plan. Parents and others caring for children and adolescents should be aware of the signs and symptoms of eating disorders and should intervene early when they appear.

CHILDHOOD OBESITY

Facts for Families

What Should Happen at the Doctor's Office?

What should I expect at my doctor's office?

If your child is over the age of 2, he or she should be screened for obesity at least once a year, usually during routine physicals or well-child visits. The results will determine whether your child is underweight, a healthy weight, overweight or obese.

How will the doctor assess my child's weight?

Your doctor will measure your child's height and weight. The height and weight measurements will be used to calculate your child's Body Mass Index, or BMI. The BMI is then plotted on a growth chart specific to your child's age and gender (BMI-for-age chart).

Your child's weight status is based upon the BMI percentile within which your child falls.

Are there harms related to obesity screening?

There are no physical side effects of obesity screening. However, being labeled as overweight or obese can cause poor self-esteem or disordered eating. It is very important that you and your doctor only speak to your child about the major causes of overweight and obesity and remain nonjudgmental and positive.

If my child is overweight, what will happen?

If your child is considered overweight or obese, the doctor may conduct a more complete assessment.

Table 1: Definitions of BMI Percentiles

IF YOUR CHILD'S BMI IS...	IT MEANS YOUR CHILD...	AND IS CONSIDERED...
< 5th Percentile	...weighs less than 95 of 100 children	Underweight
5th –84th Percentile	...weighs less than 84 of 100 children	Healthy weight
85th Percentile	...weighs more than 85 of 100 children	Overweight
>95th Percentile	...weighs more than 95 of 100 children	Obese

Source: Based on Age & Gender Specific Reference Population BMI Growth Charts from U.S. Centers of Disease Control and Prevention

This assessment may include the following:

- A complete family history, specifically looking for conditions known to be associated with overweight, such as diabetes, high blood pressure, high cholesterol levels or fatty liver;
- A complete physical exam and review of physical systems to rule out or identify physical problems that might cause excessive weight gain;
- Lab tests, such as blood cholesterol and sugar levels;
- A review of daily habits, including time spent watching television, eating habits, meals and where they are eaten and physical activity; or
- A history of psychosocial factors, such as depression or eating disorders.

What Parents Should Ask at the Doctor's Office About Children's Weight Status

- **Was my child's height and weight measured this visit?**
- **Was the Body Mass Index (BMI) calculated and plotted on a gender-specific BMI Growth Chart?**
- **What is my child's weight classification and percentile based upon the chart?**
- **Are there any weight-related concerns?**
- **What approaches for achieving a healthy weight have been successful and which do you recommend for us?**

If my child is overweight, should he/she be put on a diet?

Your doctor will recommend the best care for your child. In most cases, a diet is not appropriate. Diets can increase weight problems long term by creating unhealthy weight loss practices, unrealistic body images and damaged self-esteem.

For most overweight children, the recommended goal is not to lose weight but rather to stop or slow weight gain. As the child continues to grow, his or her height and weight eventually achieve a healthy balance.[3] Many overweight children gained too much weight largely because of the unhealthy foods they were fed — so parents have to be part of the solution. Your doctor may encourage better eating habits as well as healthier levels of physical activity for the entire family. Based upon your doctor's advice, you can develop smaller goals until you reach the doctor's recommendation. For example, if your child is accustomed to five bottles of soda per day, a realistic goal might be to cut that amount by half over the course of a few weeks until the goal of 0 sodas per day is reached.

If your child is overweight and has one or more serious weight-related medical conditions such as diabetes, high blood pressure or sleep apnea, your doctor may feel that weight loss is needed. In such cases, more structured weight management interventions may be recommended to help reduce his or her weight by about 1 pound per month until a healthy weight is achieved.

Table 2: Printable & Portable: Action Plan for Doctor's Visits

Date	Height	Weight	BMI Value	BMI %	Weight Status & Guidance

Recommendations for:

Physical Activity _____

Nutrition _____

Screen Time _____

Health Provider Evaluation	**Overall Assessment**	**Specific Guidance**	**Date for Follow up**
BMI Percentile	Summary of Results	Concrete actions for weight maintenance and obesity prevention	mm/dd/yy
Nutrition/dietary patterns			
Physical activity level			
Television & other screen time			

Reference

[3] Flynn MAT, McNeil DA, Maloff B, et al. Reducing obesity and related chronic disease risk in children and youth: a synthesis of evidence with 'best practice' recommendations. *Obesity Reviews*. 2006;7(1):7-66.

CHILDHOOD OBESITY

Facts for Families

What Should I Look for in Child Care?

How does child care contribute to childhood obesity?

Only recently has the contribution of child care to the obesity epidemic been recognized. Child care facilities provide meals, snacks and play time to many children, sometimes for a large portion of the day. Habits formed in childhood can last a lifetime.

Studies show that meals provided in child care facilities often have too much fat and rarely include the recommended servings of fruits and vegetables. Foods such as cookies, French fries, fried meat, hot dogs and high-fat condiments are served often.

How should I evaluate different child care programs?

Follow these three steps:

- **Know your state regulations.** Federal nutrition regulations exist only for child care services receiving federal money (e.g., Head Start Programs, etc). However, each state has health, safety and nutrition standards for child care providers licensed in their state. The National Resource Center for Health and Safety in Child Care and Early Education is one place to look for regulations organized by state. By understanding what your state requires, you can determine if the child care facilities you are using (or considering using) are meeting nutrition and physical activity guidelines.

- **Ask about the nutrient content of the foods the center will serve your child.** State regulations represent the minimal required for licensing purposes and, depending on the state, may not be rigorous. Ideally, meals and snacks should meet the Dietary Guidelines for Americans, which state that children should:

  — Consume **whole-grain** products often; at least half the grains should be whole grains.

  — Consume 2 cups per day of fat-free or low-fat **milk** or equivalent milk products for children 2 to 8 years old. Children 9 years old and older should consume 3 cups per day of fat-free or low-fat milk or equivalent milk products.

  — Keep total **fat** intake between 30%-35% of calories for children 2 to 3 years old; children and adolescents 4 to 18 years old should keep total fat intake between 25%-35%, with most of the fat coming from sources of polyunsaturated and monounsaturated fatty acids, such as fish, nuts and vegetable oils.

  — Consume sufficient amounts of **fruits** and **vegetables.**

- Ask how much physical activity your child will get each day. Physical activity is important to develop coordination and strengthen small and large muscles as your child grows. The amount and type of activity your child needs each day depends on is or her age.

It is also important for your child to have the opportunity to play indoors and outdoors every day in structured and unstructured ways. "Screen time," such as television, computers and electronic games, should be limited to fewer than 2 hours each day.

Table 1: Recommendations for Physical Activity by Age

Age	Structured	Unstructured	Total/Day	Days/ Week
Toddlers	30 minutes	60 minutes to several hours	Several hours	Most days
Preschool	60 minutes	60 minutes to several hours	Several hours	Most days
5 to 12 years old	No recommendation	Several hours	Several hours	Each day
Adolescents	No recommendation	60 minutes to 2 hours	Minimum 60 minutes, 2 hours recommended	Daily

Source: National Association of Sports and Physical Education

Employer-Sponsored Programs and On-site Facilities: Using What You Have

Employers can contribute significantly to the fight against childhood obesity by looking at existing programs and facilities through a new lens — children. Although it is a relatively new phenomenon, making corporate wellness initiatives and innovative family-based programs available to children is an approach more companies are initiating. Employers are incorporating children into programs traditionally focused on improving healthy behaviors for adults, such as on-site fitness facilities or on-site clinics. They are also realizing how child well-being can be improved through programs less conventionally focused on obesity, such as employer-sponsored child care and lactation programs.*

The following section provides employers with examples of how four different existing programs or facilities can be modified to combat the childhood obesity epidemic. It also highlights current efforts of Business Group member companies.

1. On-site Fitness Facilities

Physical activity is crucial for children of all ages. According to the National Association for Sports and Physical Education (NASPE), children as young as toddlers need to participate in structured and unstructured physical activity each day. Physical activity helps children develop critical motor skills, build their small and large muscles, improve their coordination and learn good habits for life.[1]

Employers might consider ways in which employee fitness centers can be utilized to increase both structured and unstructured physical activity opportunities for children.

Texas Instruments (TI) allows employees' children to use the company's three fitness facilities and provides access to personal trainers under the supervision of an adult. TI also offers employees' children 6 to 15 years old the opportunity to participate in *TI Kids Camp* or *TI Teen Camp* during the summer and school breaks. The camps offer a variety of wellness programs and educational classes, including swimming, rock climbing, bowling and nutrition. Throughout the year, TI offers swim teams, tennis lessons, fitness classes and more to children of employees.

Florida Power & Light promotes child and family well-being by granting access to its 46 fitness facilities. Dependents 16 to 23 years old are encouraged to join the facility and can work with a fitness professional for a personalized program.

**The Business Group has developed additional resources on the importance of breastfeeding and lactation programs. For more information on this topic, please visit http://www.businessgrouphealth.org/benefitstopics/breastfeeding.cfm.*

2. Child Care Services

Only recently has the contribution of child care to the obesity epidemic been recognized. Child care facilities provide meals, snacks and opportunities for physical activity to a large majority of American children for a large portion of their day.

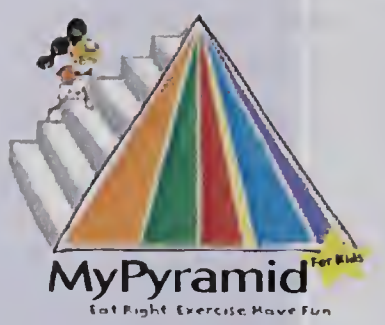
Although research is lacking, it is believed that children in child care have diets and exercise levels that are less than optimal. The lack of federal nutrition and physical activity regulations, as well as varying guidelines among state and national organizations, are possible explanations for this problem.

While there are no federal nutrition and physical activity regulations for child care facilities, there are clear recommendations from various stakeholders. The publication *Caring for Our Children,* produced by the National Resource Center for Health and Safety in Child Care and Early Education, is considered the most authoritative source on out-of-home care. It provides nutrition recommendations based on the Recommended Dietary Guidelines prepared by the U.S. Department of Health and Human Services and the U.S. Department of Agriculture. The National Association for Sport and Physical Education provides physical activity recommendations by age.

Employers can play an important role in the obesity epidemic in two ways:

- by helping their employees make informed decisions about child care based upon physical activity and nutrition standards (see Handout #4: *What Should I Look for in Child Care?*); and
- by ensuring their own employer-sponsored child care services meet the recognized national standards described below.

Nutrition Guidelines[2]



- Consume whole-grain products often; at least half the grains should be whole grain.
- Children 2 to 8 years old should consume 2 cups per day of fat-free or low-fat milk or equivalent milk products. Children 9 years old and older should consume 3 cups per day of fat-free or low-fat milk or equivalent milk products.
- Children 2 to 3 years old should keep total fat intake between 30%-35% of calories; children and adolescents 4 to 18 years old should keep total fat intake between 25%–35%, with most of the fat coming from sources of polyunsaturated and monounsaturated fatty acids, such as fish, nuts and vegetable oils.

- ❖ Children 2 years of age and older should consume sufficient amounts of fruits and vegetables.

Physical Activity Guidelines[1, 3]

- ❖ Programs should provide children of all ages structured and unstructured physical activity for specified time periods based upon age (see Table 1);

Table 1: Recommendations for Physical Activity by Age

Age	Structured	Unstructured	Total/Day	Days/ Week
Toddlers	30 minutes	60 minutes to several hours	Several hours	Most days
Preschool	60 minutes	60 minutes to several hours	Several hours	Most days
5 to 12 years old	No recommendation	Several hours	Several hours	Each day
Adolescents	No recommendation	60 minutes to 2 hours	Minimum 60 minutes, 2 hours recommended	Daily

Source: National Association of Sport and Physical Education

- ❖ Programs should provide children with opportunities to engage in indoor and outdoor physical activity every day;
- ❖ Children of any age should not be sedentary for more than 60 minutes at one time except while sleeping; and
- ❖ "Screen time," such as television, computers and electronic games should be limited to fewer than 2 hours each day.

The Employee Education section of this toolkit has a handout for employees on how to select a child care facility. See Handout #4: *What Should I Look for in Child Care?*

Child Care at Google: Promoting Healthy Practices for Children

Nestled on the outskirts of Google's Mountain View campus, about an hour south of San Francisco, is an elementary school that has been converted into a child care center for the children of Google employees. Plots of vegetable gardens and a small "forested" area create an enhanced environment that fosters a love of the outdoors.

"This is California, so we spend a lot of time outside," explains Gail Solit, the center's director. "But apart from normal recreation, we also try to engage the children in growing plants and doing other activities that absorb and teach them."

The Mountain View site is one of three serving a total of about 450 children between the ages of 4 months and 5 years. The Google Children's Center offers personalized, nurturing care with an emphasis on exercise and a nutritious diet—key elements of a healthy lifestyle.

The layout of the Mountain View center makes a minimal distinction between indoors and out. Each room opens to a courtyard that doubles as a playground. Age-appropriate toys — play equipment and sandboxes for the younger children, easels and bikes for the older kids — fill each play space. With much of the day focused on outdoor play, the children at Google engage in far more than the 90 minutes of exercise — 30 minutes unstructured, 60 minutes structured — recommended by the National Association of Sport and Physical Education.

Serving Up Recipes for Healthy Living

One of the hallmarks of life at Google is the availability of healthful foods, and the children enjoy this benefit as well. The centers have their own chef, with knowledge and expertise in preparing nutritious meals that appeal to young children's palettes. "The chef tries to expose the children to different foods," explains Solit. "Quinoa, falafel and goat cheese have all been on the menu, along with fresh fruits and vegetables."

Another effective way to drive home the message of healthy living is to show children that eating well and exercising can go together. Through activities such as gardening, children get the best of both worlds: While exercising, they produce the vegetables they need. Toddlers and preschoolers plant a variety of vegetables and herbs, including squash, tomatoes, basil, pumpkins, rosemary and lettuce. Throughout the year, the children water the plants and weed the garden.

After harvesting the vegetables, the older kids and teachers sometimes cook the food they grew. They have prepared tomato sauce from the tomatoes and basil they grew and salad with lettuce from the garden. Of course, the kids enjoy an added treat—eating their home-cooked meal of spaghetti and fresh salad. "The kids love the experience, especially when the chef joins them at the table," says Solit.

Instilling in children the importance of good foods and exercise is key to keeping childhood obesity at bay. According to research, educating young children at an early age is a powerful way to ensure that they will make healthy choices throughout their lives.

Medtronic allows children at their on-site child care center to use the company wellness center for large motor activities. Wellness center staff also teach weekly exercise and nutrition classes to the children.

3. On-site Clinics and Staff

In 2008, 29% of 453 large employers surveyed had on-site medical clinics.[4] On-site medical clinics offer convenience to the employee and value to the employer. Seventy-seven percent of employers also believe the clinics provide better access to preventive care.[4]

The majority of on-site clinics offer screening and weight management support to patients. However, few clinics offer services to dependent children.[5] Employers may consider expanding the traditional services offered at their on-site clinic to children. Specifically, the body mass index screenings and weight management support provided to employees would be beneficial to children and families.

Located on the **Cerner Corporation's** World Headquarters campus in Kansas City, the company's Healthe Clinic has provided primary care services to associates and their families since 2006. The clinic's motto for dependent care is "growing healthy," which stresses the company's interest in seeking opportunities to reach children.

Staffed by four physicians and one nurse practitioner, the clinic sees children for both well-child and acute care visits. Health care providers complete a variety of preventive care, including obesity screenings and pediatric immunizations.

Cerner also reserves its clinic for kindergarten school physicals 1-2 days per year, seeing 50-60 children per day. Each clinic "care suite" is designed for a separate service (e.g., vision screening, hearing screening, etc.) and offers prizes to children as a way to improve his or her experience. The clinic also offers sports physicals for children of all ages.

4. Take Your Child to Work Day

"Take your Child to Work" days have become annual events for many companies. This event shows children the value of education and teaches them about future work life. Employers also can use this opportunity to educate children about the importance of a healthy life.

During **General Mills'** annual "Take Your Kids to Work" day, the health promotion team provides activities for employees' children to have fun and learn new healthy habits. In 2008, General Mills provided fitness classes to the children, as well as Frisbee golf and dodgeball games. The company also had a registered dietitian teach children how much sugar is in soda and how to make better fast food choices.

Florida Power and Light offers programs on "Take your Child to Work" day, including physical fitness obstacle courses, "germ buster" hand washing classes and "Choose Well" interactive nutrition games.

Employer-sponsored facilities and events traditionally offered to improve the health and well-being of employees can be designed to improve the health of children as well. Fitness centers and child care facilities have the opportunity to improve physical activity levels and the intake of nutritious food. On-site clinics can promote consistent screening for childhood obesity and offer quick and effective treatment when necessary. By instituting these simple changes, on-site facilities have the opportunity to initiate and support lasting behavioral change among children.

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[2] U.S. Department of Health and Human Services, U.S. Department of Agriculture. Dietary guidelines for Americans, 2005. Washington, DC: U.S. Department of Health and Human Services, U.S. Department of Agriculture; 2005.

[3] National Association of Sport and Physical Education. *Physical activity for children: a statement of guidelines for children ages 5–12, 2nd edition.* Available at: http://www.aahperd.org/naspe/template.cfm?template=ns_children.html. Accessed June 22, 2009.

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Community and Philanthropic Efforts: Reconsidering Company Contributions

Employers have long been active, responsible and respected community members. Corporate philanthropy has enabled many non-profits, advocacy groups and charitable organizations to improve the quality of life of individuals nationwide. Many of these groups promote wellness and fight obesity among children by addressing its underlying causes: poor nutrition and limited physical activity. Employers interested in childhood obesity should evaluate the recipients of current company contributions and consider reallocating a portion of those contributions to initiatives focused on youth.

This section provides three ways companies can support the fight against childhood obesity in their local communities. While not an exhaustive list or the "gold standard" of programs, the examples below do illustrate the scope and range of community-based activities designed to address and reduce the burden of childhood overweight and obesity. The examples also highlight how Business Group members are taking action.

1. Sponsor or Promote Local Events

Companies can take advantage of a growing number of opportunities available to promote childhood physical activity through the sponsorship of or participation in local activities targeting families and children. Activities can be held in collaboration with the community or at company facilities.

Medtronic has sponsored the Medtronic Twin Cities Kids Marathon for several years. The Minnesota initiative offers 4-, 8- and 12-week online training programs for schools and families. Training can occur at any time, with three family races planned throughout the year (i.e., cross-country in the spring, a road race in the fall and indoor track in the winter). The program was named the "National Youth Event" of the year by Running USA.

CVS Caremark sponsors the CVS Caremark Downtown 5K in Rhode Island annually. The race promotes physical activity at a young age by holding competitions for children as young as age two. In 2009, CVS Caremark will be co-sponsoring a new initiative called "Walk the Nation." This initiative is being rolled out by Shape Up Rhode Island and piloted at three Rhode Island school locations. This wellness program is designed to encourage and inspire three fifth-grade classes to be more physically active. The program will provide each student with a map, a guidebook,

a pedometer and a personalized logbook to help them "visit" each state by walking a certain number of steps every day and keeping track of their pedometers.

GENERAL MILLS

General Mills has hosted "The Run of the Mills" at its headquarters since 2003. General Mills' employees, friends and family can participate in a 5K run or 1-mile walk; children under the age of 12 can participate in a quarter-mile "Trix Trot."

2. Support Established Programs and Campaigns

International Walk to School Day

Walk to School Day began in Chicago in 1997 and has grown to more than 3 million walkers in all 50 states and more than 40 countries.[1] Ten years after its start, more than 6,000 U.S. schools participated in Walk to School Day.

Employers can become involved with the International Walk to School Day on the national or local level in a variety of ways:

- by encouraging employees to participate in Walk to School day with their children;
- by working with schools in their local area to provide refreshments or incentives such as pedometers or reflective gear; or
- by co-branding Walk to School Day events at the national or local level.

Employers can learn more about the campaign, as well as sign up as a resource for specific state activities, at: www.walktoschool.org.

Since 1999, **FedEx** has teamed up with SafeKids Worldwide to support International Walk to School Day with a specific initiative entitled "Safe Kids Walk this Way." In over 150 cities nationwide, FedEx and SafeKids work together to host walk to school events.[2] FedEx encourages its employees to volunteer to educate schoolchildren about the pedestrian safety issue, or walk with children to and from school on International Walk to School Day. In 2006, more than 1,000 employees volunteered to participate in the event. FedEx also provides funding to Safe Kids Worldwide to help form pedestrian safety task forces in high-risk communities nationwide.[3] Grants to more than 40 communities have been awarded.[2]

Worldwide Day of Play

To counteract the ubiquitous trend of childhood sedentary behavior, Nickelodeon began Worldwide Day of Play in 2004. During this annual event, the network temporarily shuts down its television and Internet outlets, encouraging children to "get out and play." The initiative is supplemented with educational programming about healthy lifestyle choices, including nutrition and physical activity.

By 2007, more than 1,000 events around the country were planned to coincide with Worldwide Day of Play, and more than 250,000 children participated.[4] Employers can encourage employee participation in local community efforts coinciding with *Worldwide Day of Play,* or can provide support to organizations in their community hosting local events. To learn more about *Worldwide Day of Play,* please visit Nickelodeon's website. To learn about activities in specific locations or sponsorship opportunities, employers can contact Nickelodeon at publicaffairs@nick.com.

MEND: The British Perspective on Engaging Communities

The United States is not alone its struggles with obesity. Countries around the world also face this issue and have developed programs to combat it. MEND (Mind, Exercise, Nutrition, Do It) is a United Kingdom (UK)-based childhood obesity program currently expanding to the United States. The program aims *"to enable a significant, measurable and sustainable reduction in global childhood and family overweight and obesity levels."*[5]

MEND programs are tailored to accommodate individuals of various ages and weights. Twenty two-hour sessions over 10 weeks cover the mental and emotional aspects of obesity, nutrition, exercise and fitness, food label comprehension and other skills for children and families. MEND is designed to be replicable and scalable — a "solution in a box," including an online management monitoring system.[5]

MEND was established in 2005 and has expanded to more than 300 sites throughout the UK, with support from grants and sponsorships. In October 2008, MEND began its first U.S. program in New York. Employers have the opportunity to bring the MEND program to their communities by serving as a funding or delivery partner. Delivery partners provide venues, staff and participants, while funding partners help subsidize new program development.[5]

Business Group members interested in hosting or sponsoring the MEND program in their area can obtain more information at: http://www.mendprogramme.org.

Boys & Girls Clubs of America

The Boys & Girls Clubs of America (BGCA) provide children 6 to 18 years old opportunities to develop positive uses of leisure time, active lifestyles and strong interpersonal skills. The Boys & Girls Clubs have a variety of sports and recreation intiatives with which employers may become involved as volunteers or corporate sponsors, including baseball, softball and football programs. Employers interested in working with children in their community can either contact their local Boys & Girls Club or the headquarters office in Atlanta. For more information, please visit: http://www.bgca.org/programs/sportfitness.asp.

3. Participate in Community Coalitions

Many grassroots efforts are underway across the country to improve healthy behaviors and eliminate obesity. Employers have an opportunity to participate in local constituency groups or coalitions to help bring about change in the communities in which they live and work.

Business Group members **Paychex, Wegmans Food Markets** and **Xerox,** along with other companies, including Bausch & Lomb, the Rochester Institute of Technology (RIT) and Kodak, have formed a health planning team in Rochester, N.Y., to help implement environmental and policy changes, with the goal of making Rochester the healthiest community in the United States. The following are just two examples of initiatives that have been undertaken.

1. In 2008, 204 companies and over 44,000 employees participated in the 8-week "Eat Well. Live Well. Challenge" (10,000 steps and 5 cups of fruits/vegetables per day). In the last 3 years, participants in this challenge have walked over 40 billion steps and have eaten more than 15 million cups of fruits and vegetables.
2. A goal to increase the utilization of generic medications in the Rochester community to 70% was established. This goal was achieved by the 3rd quarter of 2008; savings realized are estimated to be $57 million.

The Centers for Disease Control and Prevention (CDC) provides funding to selected communities across the country to develop community coalitions through its program *ACHIEVE (Action Communities for Health, Innovation, and EnVironmental changE).* ACHIEVE brings together local leaders and key stakeholders to build healthy communities nationwide through policy changes and environmental strategies. Through

ACHIEVE, employers can partner with other community organizations, including health departments, local parks and recreation agencies and YMCAs.

ACHIEVE currently supports 43 communities nationwide and adds communities annually. Employers can participate in ACHIEVE communities by working with the local community coalition or providing input to it. Through participation, employers can help foster a healthy environment where their employees live, creating opportunities for off-the-job behavior change and healthy lifestyles. To learn more about the communities in which ACHIEVE is active, employers can visit its website at http://www.achievecommunities.org.

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[7] Boys & Girls Clubs of America. Triple Play: A Game Plan for the Mind, Body and Soul. Available at: http://www.bgca.org/programs/tripleplay.asp. Accessed on July 9, 2009.

Resources

National Organizations and Government Agencies

American Academy of Pediatrics
www.aap.org

The American Academy of Pediatrics has also developed an obesity website (**www.aap.org/obesity**) to raise awareness about childhood obesity. The site is designed to provide guidance to pediatricians, families and communities to prevent childhood obesity.

American Dietetic Association
www.eatright.org

Association of Maternal and Child Health Programs
www.amchp.org

Bright Futures Program
www.brightfutures.aap.org

Centers for Disease Control and Prevention
www.cdc.gov/obesity

The CDC also houses its new Lean Works website (**www.cdc.gov/LEANWorks**) to help employers plan, build and promote obesity interventions at the worksite. The new site includes an Obesity Cost Calculator, which companies can use to figure out how much obesity costs them; Employer Case Studies, which describe successful on-site obesity prevention programs; as well as effective strategies, timelines for development and needs assessment tools.

Heath Resources and Services Administration Maternal and Child Health Bureau
http://mchb.hrsa.gov

National Association of Children's Hospitals and Related Institutions
www.childrenshospitals.net

National Association for Sport and Physical Education
www.aahperd.org/naspe

The National Eating Disorders Association (NEDA)
www.nationaleatingdisorders.org

National Heart Lung and Blood Institute
www.nhlbi.nih.gov/health/public/heart/obesity/lose_wt

National Institutes of Health
www.nih.gov

The National Institutes of Health *We Can!*™ or "**W**ays to **E**nhance **C**hildren's **A**ctivity and **N**utrition" is a national program designed for families and communities to help children maintain a healthy weight. *We Can!* provides families and communities with helpful resources that can be used to help prevent childhood overweight.
www.nhlbi.nih.gov/health/public/heart/obesity/wecan

National Institute for Health Care Management Foundation
www.nihcm.org/childframe

National Resource Center for Health and Safety in Child Care and Early Education
http://nrckids.org

Robert Wood Johnson Childhood Obesity Initiative
www.rwjf.org/childhoodobesity

U.S. Department of Agriculture
Food and Nutrition Information Center
www.nutrition.gov

Physical Activity Sources

Children's Sports
For a checklist of things to think about when deciding to sign a child up for a sports team or activity, visit **www.aahperd.org/naspe**.

Instant Recess™ and *Lift Off!*

California Department of Health disseminates evidence- and practice-based strategies and policies that incorporate physical activity and healthy food choices into organizational routine, as well as the original Instant Recess™ DVD. Ten-minute recess breaks for physical activity, walking meetings, and other kinds of exercise are all reviewed by the team at **www.cdph.ca.gov/programs/CPNS/Pages/PhysicalActivityIntegration.aspx**.

Healthy Weight/Diet

The Weight-Control Information Network (WIN)

A program of the National Institute of Diabetes and Digestive and Kidney Diseases, WIN provides the general public, health professionals, the media and Congress with up-to-date, science-based information on weight control, obesity, physical activity and related nutritional issues: **www.niddk.nih.gov/health/nutrit/win.htm**.

Daily Menu Planner

A service of the National Heart Lung and Blood Institute, the Daily Menu Planner is an interactive online menu planner that tracks the day's calories, grams of saturated fats and carbohydrates: **http://hp2010.nhlbihin.net/menuplanner/menu.cgi.**

BMI and BMI-for-Age Charts and Calculators

The Centers for Disease Control and Prevention provide online BMI Calculators to help parents and providers assess the weight categories of children: **http://apps.nccd.cdc.gov/dnpabmi.**

Child & Adult Care Food Program (CACFP)

Managed by the U.S. Department of Agriculture, the CACFP provides sound guidance on the quality of day care, including the nutritional value of meals and snacks: **www.fns.usda.gov/cnd/Care.**

USDA Dietary Guidelines for Americans (Dietary Guidelines for Americans)

Published every five years, the U.S. Department of Health and Human Services and the U.S. Department of Agriculture provide authoritative advice on healthy food intake: **www.health.gov/dietaryguidelines.**

Understanding Portion Sizes

An entertaining and interactive online quiz provides information on how increased portion sizes affect calorie intake and physical activity requirements: **http://hin.nhlbi.nih.gov/portion.**

Free or Low-cost Cookbooks with Healthy Recipes

The following cookbooks are available online for free or can be ordered at low cost from the National Heart Lung and Blood Institute: **www.nhlbi.nih.gov/health.**

- ❖ Stay Young at Heart
- ❖ The DASH Eating Plan (reduces high blood pressure)
- ❖ Heart Healthy Latino recipes
- ❖ Heart Healthy Home Cooking African American Style
- ❖ Keep the Beat: Heart Healthy Recipes

USDA Center for Nutrition Policy and Promotion

The USDA Center for Nutrition Policy and Promotion (CNPP) works to improve the health and well-being of Americans by developing and promoting dietary guidance that links scientific research to the nutrition needs of consumers. CNPP is an agency of USDA's Food, Nutrition, and Consumer Services. **www.cnpp.usda.gov**

Weight Watchers

The book *Family Power 5 Simple Rules for a Healthy-Weight Home* provides home assessments and strategies to help individuals maintain a healthy weight. **www.weightwatchers.com/util/art/index_art.aspx?tabnum=1&art_id=23611&sc=807**

Resources for Children and Adolescents

Healthy Eating/Weight

Interactive Eat Right Website

Helps children reach the recommended goal of eating 5 fruits or vegetables each day. This entertaining website features goal challenges and family contracts. Information and tools have been developed specifically for children, parents, teachers and school food service personnel. Visit **www.dole5aday.com**.

KidsHealth Website
Well written, easy-to-read fact sheets for children and teens can be found on the KidsHealth website developed by the Alfred I. duPont Hospital for Children and Nemours Children's Clinics. The site features practical exercise advice, healthy food facts, menu ideas and recipes. The teen section addresses dieting, eating disorders, steroid use and other topics. Visit **www.kidshealth.org**.

Take Charge of Your Health: A Teenager's Guide to Better Health
From the Weight Control Information Network of the National Institute of Diabetes and Digestive and Kidney Diseases, this publication communicates directly to teenagers: **www.win.niddk.nih.gov/publications/PDFs/teenblackwhite3.pdf**.

Physical Activity

Boohbah — TV show for Very Young Children
This may be the answer to an exercise video for very young children. Public television has launched Boohbah, starring five colorful atoms of energy that dance and move through a colorful world. Real children appear to participate and demonstrate problem solving and the concept of cause and effect: **http://pbskids.org/boohbah/parentsteachers/parents.html**.

Physical Activity Awards
Since 1956, the President's Council on Physical Fitness and Sports has urged Americans to lead active, healthy lives. People of all ages can earn the President's Challenge awards for beginning an active lifestyle or moving an already active life on to a new challenge. Programs are available for:

- Children ages 6 to 12 years old
- Teens
- Adults
- Seniors
- Educators

Activities can be tracked on the online activity log, and awards can be ordered from the website. Visit **www.presidentschallenge.org**.

Kidnetic.com

Kidnetic.com features games for one or more players that are designed to get children ages 9 to 12 years old up and moving. For example, children can design a dance on the computer and then get up and follow the moves or go on a scavenger hunt around the home, with the goal of beating the clock back to the computer. The site includes a section of information for parents. Visit **www.kidnetic.com.**

The VERB campaign

The VERB campaign has developed informational materials, such as posters and brochures, aimed at maintaining physical activity among youth ages 9 to 13 years old. Developed by the CDC, the site features information for youth and families and is translated into multiple languages. The website is designed for schools and youth leaders. Visit **www.cdc.gov/YouthCampaign.**

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About the Institute on the Costs and Health Effects of Obesity

The Institute on the Costs and Health Effects of Obesity is part of the National Business Group on Health.

The Institute works with large employers to develop practical and cost-effective solutions to reduce the health and cost impact of overweight and obesity on workers and their families.

For more information about the Institute, please contact healthyweight@businessgrouphealth.org

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